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-- remove volatile residuals. The resulting polymer was a yellow to white solid having a weight average molecular weight of 950,000, a number average molecular weight of 230,000, and bulk viscosity of 2000 centipoise. The effectiveness of the polymer as a thickener for HPIB was measured as described above. The thickened oil product was opaque and had a viscosity of 5400 centipoise. --

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### In the Claims

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1. (Amended) A thickened oil composition comprising
- (1) an oil, and
  - (2) dispersed in the oil, a polymer which
    - (a) has a crystalline melting point,  $T_p$ , and an onset of melting temperature,  $T_o$ , such that  $T_p - T_o$  is less than  $T_p^{0.7}$ ;
    - (d) is soluble in the oil at temperatures above  $T_p$ ,
    - (e) has been dispersed in the oil by a process which comprises
      - (i) dissolving the polymer in the oil at a temperature above  $T_p$ , and
      - (ii) cooling the solution to crystallize the polymer in the oil, and
    - (f) [has at least one of the following characteristics
      - (i) it is a side chain crystalline (SCC) polymer which contains repeating units containing at least one group selected from oxygen-containing groups, e.g. a hydroxyl group; nitrogen-containing groups; fluorine-containing groups; and silicon-containing groups, e.g. silyl groups;
      - (ii) it is a side chain crystalline (SCC) polymer which is substantially free of carboxylic groups, carboxylic
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groups in the form of salts, and sulfonic acid groups in the form of salts;

- (iii) it is a side chain crystalline (SCC) polymer which contains carboxylic acid groups in an amount less than 0.075 meq/g;
- (iv) it is a side chain crystalline (SCC) polymer which contains repeating units containing long chain alkyl groups containing at least 26 carbon atoms;
- (v) it is a side chain crystalline (SCC) polymer which is substantially free of functional groups;
- [(iv) it is a side chain crystalline (SCC) polymer which is substantially free of ionizable groups;
- (vi) it is a side chain crystalline (SCC) polymer which is a block copolymer or a graft copolymer;
- (vii) it is a homopolymer;
- (viii) it is a main chain crystalline polymer; and
- (ix) it is a homopolymer or copolymer of caprolactone;]

the composition being at a temperature below  $T_p$ .

Cancel claim 4.

Please add the following new claims 5-20.

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- 7 5. A composition according to Claim 1, wherein the SCC polymer is present in amount at least 3 % by weight and contains at least 80% by weight of repeating units containing a side chain comprising a linear polymethylene radical containing 10 to 50 carbon atoms.

6. A composition according to Claim 1, wherein the SCC polymer is present in amount at least 3 % by weight and contains at least 80% by weight of repeating units containing a side chain comprising a linear perfluorinated polymethylene radical containing 6 to 50 carbon atoms.

7. A composition according to Claim 1, wherein the SCC polymer is a homopolymer.

8. A composition according to Claim 1, wherein the SCC polymer consists essentially of units derived from least one n-alkyl acrylate or methacrylate in which the n-alkyl group contains 12 to 50 carbon atoms.

9. A composition according to Claim 8 wherein the SCC polymer is present in amount at least 3 % by weight and the n-alkyl group contains 16 to 50 carbon atoms.

10. A composition according to Claim 1, wherein the polymer is a copolymer which consists essentially of units derived from

(a) at least one n-alkyl acrylate or methacrylate in which the n-alkyl group contains 12 to 50 carbon atoms, and

(b) at least one alkyl acrylate or methacrylate in which the alkyl group is not an n-alkyl group containing 10 to 50 carbon atoms.

11. A composition according to Claim 10 wherein the SCC polymer is present in amount at least 3 % by weight and the n-alkyl group contains 16 to 50 carbon atoms.

12. A composition according to Claim 1, wherein  $T_p$  is above 40 °C.

13. A composition according to Claim 1, wherein  $T_p$  is 40-50 °C.

14. A composition according to Claim 1, wherein  $T_p - T_o$  is less than 10 °C.

15. A thickened oil composition comprising

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cont
- (1) an oil, and
  - (4) dispersed in the oil, at least 3% by weight of a side chain crystalline (SCC) polymer which
    - (a) has a crystalline melting point,  $T_p$ , of 20 to 80 °C, and an onset of melting temperature,  $T_o$ , such that  $T_p - T_o$  is less than 10 °C;
    - (b) is soluble in the oil at temperatures above  $T_p$ ,
    - (c) has been dispersed in the oil by a process which comprises
      - (i) dissolving the polymer in the oil at a temperature above  $T_p$ , and
      - (ii) cooling the solution to crystallize the polymer in the oil,
    - (d) contains at least 80% by weight of repeating units containing a side chain comprising a linear polymethylene radical containing 10 to 50 carbon atoms or a linear perfluorinated polymethylene radical containing 6 to 50 carbon atoms, and
    - (e) is substantially free of functional groups;

the composition being at a temperature below  $T_p$ .

16. A composition according to Claim 15 which is substantially free of water.

17. A composition according to Claim 15 which is a water-in-oil emulsion.

18. A composition according to Claim 15, wherein  $T_p$  is 40-50 °C.

19. A composition according to Claim 15, wherein the SCC polymer consists essentially of units derived from at least one n-alkyl acrylate or methacrylate in which the n-alkyl group contains 12 to 50 carbon atoms.

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